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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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10/802,961

03/16/2004

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06/30/2004

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EXAMINER

HOLLINGTON, JERMELE M

ART UNIT

PAPER NUMBER

2829

DATE MAILED: 06/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|--|--|--|
| Office Action Summary | Application No. 10/802,961 | Applicant(s) STONE, WILLIAM M. | |
| | Examiner Jermele M. Hollington | Art Unit 2829 | |

-- The MAILING DATE of this communication appears on the cover sheet with the corresponding address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 March 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Specification

1. The disclosure is objected to because of the following informalities: on page 1, line 4, the U.S. Patent Application number 09/908,149 needs to be updated. U.S. Patent Application number 09/908,149 is now U.S. Patent No. 6,744,270. Appropriate correction is required.

Double Patenting

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 1-16 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-16 of U.S. Patent No. 6,744,270 in view of Pfahnl et al (6717115).

Regarding claims 1-16, the claims 1-16 of this application are similar to the claims 1-16 of U.S. Patent No. 6744270 wherein claims 1-4 of this application corresponds to claims 1-4 of the U.S. Patent, claims 5-7 corresponds to claims 14-16 of the U.S. Patent and claims 8-16 corresponds to claims 5-13 of the U.S. Patent. However, claim 1 of the application has a slightly different limitation such as "...a layer channels at a surface of the thermal plate..." compare to "...a layer channels adjacent to the thermal plate..." in claim 1 of U.S. Patent 6,744, 270. It is known and obvious in the art to have a layer channels at a surface of the thermal plate rather than

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adjacent to the thermal plate as shown by Pfahnl et al. Pfahnl et al disclose [see Figs. 2-3] a semiconductor handler comprising a fluid distribution assembly having a layer of channels (channel fluid plates 18 and 21) at a surface [back surface see Fig. 2] of a thermal plate (10) for facilitating the flow of a fluid [heat exchange fluid] through the thermal plate (10) [see col. 5, lines 36-54]. Further, Pfahnl et al teach that the addition of layer channels at a surface of the thermal plate is advantageous because it provides a flow path for a heat exchange fluid which is what cools the entire thermal plate and is the main source of temperature control during cold-temperature operation. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have layer channels at a surface of the thermal plate rather than adjacent to thermal plates as taught by Pfahnl et al in order to provide a flow path to cool the entire thermal plate and be the main source of temperature control during cold-temperature operation.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 17-22 rejected under 35 U.S.C. 102(e) as being anticipated by Olsen et al (6545494).

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C.

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102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention “by another,” or by an appropriate showing under 37 CFR 1.131.

Regarding claim 17, Olsen et al disclose an apparatus [see Fig. 1] [see **Note** below] comprising a test system (wafer probing system 10) in which an integrated circuit [refer to as IC] (wafer under test 16) is supported [via prober base 12], a temperature controller (24) coupled to the test system (10), the temperature controller (24) comprising a fluid source (thermal interface 26) for providing a fluid (gas air) to the test system (10) in thermal communication with the IC (16), a controller (tester 22) for controlling the temperature of the fluid (gas air) to control the temperature of the IC (16), a fluid heater [see column 4 lines 10-12] for heating the fluid (gas air) the fluid heater being located within the test system (10).

Note: The recitation “for testing an integrated circuit” has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

Regarding claim 19, Olsen et al disclose the fluid is air [see column 3 lines 1-13].

Regarding claims 20-21, Olsen et al disclose the test system (10) could be either a wafer prober or a package device handler.

Regarding claims 22-23, Olsen et al disclose the IC (16), which is packaged, is part of an IC wafer (see Fig. 3).

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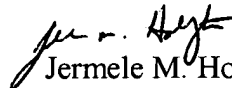
Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Sauerland (5451884), Minning et al (5847927), Burward-Hoy (5977785), Cowan et al (6445202 and 6512391), Jones et al (6489793), Turner (6518782), DiBattista et al (6549026), Olsen et al (6545494, 6552561) disclose a method and apparatus for heat control of device under test by a temperature controller.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jermele M. Hollington whose telephone number is (571) 272-1960. The examiner can normally be reached on M-F (9:00-4:30 EST) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kamand Cuneo can be reached on (517) 272-1957. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Jermele M. Hollington
Examiner
Art Unit 2829

JMH
June 22, 2004